when the raised veins on the under surface renders it somewhat roughish to the touch. The broadly-margined petioles are also strikingly characteristic, so that Dr. Gray, to whom the plant was sent a short time before his death, wrote me that he had never seen before an *Aster* with just such leaves.

No specimens of it have reached me from New England. As far as known its range extends from Southern New York and Northern New Jersey through Pennsylvania and Western Maryland to Eastern Kentucky and Ohio, but it is likely to be observed west and south of these limits.

Var. LANCEOLATUS (*A. cordifolius*, var. *lanceolatus*, Porter, BULLETIN, xvi. 68.

Var. INCISUS (Britton), *A. cordifolius*, var. *incisus*, Britton, BULLETIN, xix. 224.

To the stations for the latter given by Dr. Britton may be added Moosic Lake, Lackawanna County, Pa., where I collected it in 1884.

It may be of interest also to mention that two northern species of the same genus have been lately found in this neighborhood, *A. patulus*, Lam., at Bethlehem by E. A. Rau, and *A. amethystinus*, Nutt., on the Delaware near Easton, by A. A. Tyler.

THOMAS C. PORTER.

Botanical Notes.

Our Index to Recent literature relating to American Botany. An editorial in the "Botanical Gazette" for May makes flattering reference to this department of the BULLETIN, but expresses the wish that something more extensive and complete might be furnished for recording the writings of American botanists—something on the plan of Just's "Botanical Jahresbericht," which forms two thick octavo volumes each year, and is supposed to record and abstract all botanical writings the world over, but which has always been markedly deficient in its allusions to American publications, and which is always from 18 to 30 months behind the time.

The suggestion appears to us as a very happy one, and the present editors of the BULLETIN would gladly see it carried out.

The pressure on our pages for the publication of original matter is such that it has at times been seriously debated whether we ought not to abandon the "Index," and the labor of keeping it up and attempting to scan all the periodical literature of the day, has made most serious inroads upon our time. We believe that we have recorded the great bulk of botanical papers relating to American plants during the time the "Index" has been carried along (1886–1893), but that there have been noteworthy omissions is certain, and we have been forced to notice hundreds of articles by title only, which would have been abstracted, if there had been more time and space.

One method of carrying out the Gazette's suggestion, and it may be the most practical method, so far as the preparation of the material goes, would be for persons at each of the botanical centres to make themselves responsible for certain of the journals and society publications, abstract the papers therein and send the abstracts to a central point to be collated and arranged: the abstracts to be written on blanks prepared for the purpose. It would be necessary for some one to act as editor-in-chief, and that there should be a large number of abstractors as associates. The first thing to be done would be to ascertain just what periodicals were regularly received at each of the centres participating in the work, and then to assign the periodicals. The books and pamphlets printed as such would naturally be assigned to persons whose work lay along the lines of the subjects treated. As to publication, we conceive that this should be regularly conducted at intervals, say of three months, which would make in effect another botanical journal. The "Gazette" doubts that this would pay for itself from subscriptions. But would not this be an appropriate organ for the "Botanical Society of America," proposed by Professor Bailey at the Rochester meeting of the American Association, and for the organization of which a committee was then appointed? (See BULLETIN xix. 294.) We believe that there are as many as 200 botanists in America who would be willing to form such an organization with dues at five dollars per annum, which would provide an income of $1000 irrespective of sales, and the number of botanists in the country is steadily increasing. Such a sum as this would warrant the printing and distribution of 600 or 700 pages annually.

It is interesting to note that when the "Index" was commenced the "Gazette" expressed the hope that there would be sufficient matter to "keep this department always full, but we doubt it." (Bot. Gaz. xi. 66.)

Sphagna Boreali-Americana Exsiccata. Prospectus.—The undersigned propose to issue, about two years from the present time, sets of specimens of North American Sphagna. The number of species attributed to the United States and British America is now nearly fifty, and many of them have never been distributed.

Many of the species are represented by several varieties; so that for anything like a full series, there should be at least one hundred forms in the collection; perhaps one hundred and thirty would be a better estimate. It is proposed to prepare not less than sixty sets of the specimens, and to offer a set to each person who may supply three or more acceptable forms in quantity sufficient for distribution. The remaining sets will be used for foreign exchanges, and for sale at a price to be named hereafter. Promises of assistance have been received already from Mrs. E. G. Britton of Columbia College, Prof. John Macoun of Canada, Dr. W. A. Setchell and Dr. A. W. Evans of New Haven, Dr. A. W. Chapman of Florida, Mr. J. K. Small of Lancaster, Penn., Mr. Edward L. Rand of Boston, and others, and there is every reason to hope that the collection may be made to include nearly all the known species of temperate North America.

Most of the species the undersigned feel competent to identify; any that are in the least degree doubtful will be submitted to Dr. C. Warnstorf, the most learned living sphagnologist, for final determination.

A few hints as to preserving specimens may be offered. All the plants for one series of sixty specimens should be gathered at one time and place, to avoid the chance of mixing two different forms under one number. The plants of dense habits of growth should be separated into broad, thin specimens while fresh, cleaned of foreign matter, and preserved in botanizing portfolios in the usual manner, taking care not to subject them to any severe compression. Just enough pressure to keep them flat is enough. Floating plants, such as the plumose forms of *S. cuspidatum*, are best prepared by spreading the specimens on letter-paper, as is

usual in preserving the more delicate seaweeds. If the collector has no means of pressing the specimens, they may be gathered in bulk, and, when air-dried, sent in packages to Professor Eaton, who can have them softened and spread out for drying at some convenient time. Care should be taken to note the place and time of each collecting, and the approximate height of the station above sea-level.

The coöperation of American Botanists is respectfully asked for; and letters or collections may be addressed to either of the undersigned. DANIEL C. EATON.

YALE UNIVERSITY, New Haven, Conn.

EDWIN FAXON.

317 LAMARTINE STREET, JAMAICA PLAIN, MASS., April, 1893.

Note on some Characeæ.—The first fascicules of the second part of the "Characeæ of America" was issued at the close of 1892. I omitted to affix any date, so that this notice seems necessary to secure priority for the new species therein described. *Nitella formosa*, Allen, described as a new species in this volume of the BULLETIN, p. 119, now turns out to be a form of *N. hyalina*, A. Br., related to *N. hyalina*, var. *Engelmanni*, A. Br., first described as *N. Engelmanni*, A. Br. I have recently had the opportunity to examine the Engelmann collection of Characeæ belonging to the Shaw School of Botany, in St. Louis. This collection is rich in types of A. Braun's species; it contains one fine specimen of *N. Engelmanni*, of which I have secured photographs.

T. F. ALLEN.

Ipomœa pandurata. Not long ago my attention was drawn to a huge root, which was unearthed by the workmen in the cemetery of this place (Springfield, Ohio). On examination it proved to belong to the above named species. This particular root is remarkable only for its size. I have never heard of the root of this species reaching the size of the one I am describing, therefore I think it worthy of record. Professor Gray says the root often weighs from ten to twenty pounds. The weight of the specimen here was found to be twenty-five pounds. The length was about two and a half feet, and the diameter over six inches at the thickest part. Flowers of this "Man-of-the-Earth" have been observed annually for twenty-nine years at the place where the root was dug up. A. F. LINN.

WITTENBERG COLLEGE, May 15, 1893.